STATE OF MISSOURI

Office of Information Technology

The New Millennium

THE INFORMATION TECHNOLOGY STRATEGIC PLAN
FOR MISSOURI STATE GOVERNMENT   JULY 2000

The New Millennium

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Office of Information Technology

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Preface

D uring the last quarter century, Missouri State Government agencies employed information technology (IT) to pursue their various missions. For the most part, the efforts of these agencies were independent of each other, sometimes resulting in a duplication of systems and hardware. Often citizens' needs were a secondary consideration to agency requirements when collecting information and providing services.

In July 1995, as a result of Governor Carnahan's Commission on Management and Productivity, the Office of Information Technology was established. The primary mission of this office is to develop and implement an Information Systems Strategic Plan. In October 1995, the Information Technology Planning Board, made up of agency representatives, began developing a strategic plan. These representatives arrived with a wide variety of backgrounds and brought a business perspective to the planning process.

" We have the potential to provide state-of-the-art solutions to citizens in their homes or communities"

Much work has been accomplished since June 1996, when the original IT Strategic Plan was formalized. Many IT initiatives are now shared across agencies and the Information Technology Advisory Board (ITAB) serves a strategic role in Missouri State Government. The beginning of the new millennium introduces the necessity for services to the citizen be made available via the Internet and challenges Missouri State Government with new issues of security and privacy in this emerging electronic age.

The goals and objectives outlined in this plan are broad and far-reaching. The challenges are significant. As challenging as the road will be, the possibilities are vast. We have the opportunity to change the way citizens of Missouri view their state government. We have the potential to provide state-of-the-art solutions to citizens in their homes or communities. We have the momentum to develop statewide systems that empower workers and streamline workflows.

With this momentum, Missouri will begin the new millennium providing information and services to every citizen in the state in an effective and efficient manner through the use of information technology. Citizens will gain ready access to the vast information state agencies possess. Services will be structured and provided so as to minimize the time and effort citizens must expend to interact with agencies of Missouri State Government.

Chapter

1

Introduction

Executive Summary

This document is a road map for using Information Technology throughout Missouri State Government. It is the result of recommendations originated by Governor Carnahan's Commission on Management and Productivity.

The State of Missouri must focus on four key areas in the coming years.

- Access – easily accessible and readily available information and services

- Optimization -- effective and efficient use of information technology

- Architecture - a planning vehicle and communications medium for technology infrastructure

- Innovation -- innovative use of information technology to benefit citizens

This document details the primary objectives developed during the planning process.

- Provide computerized access to public information held by Missouri State Government.

- Provide a single point-of-access to Missouri State Government services.

- Effectively and efficiently utilize Missouri State Government Information Technology resources and investments.

- Promote state interests through coalitions and organizations with similar interests.

- Recruit, develop and retain a skilled information technology workforce within Missouri State Government.

- Consistently meet organizational business needs through IT projects that are delivered on time and within budget.

- Develop a State of Missouri enterprise architecture that facilitates business system sharing across departmental lines of responsibility.

- Provide an environment that will guarantee the security of Missouri State Government data and the integrity of that data.

- Ensure the ability to exchange data among government entities.

- Provide a communication network capable of supporting Missouri State Government's business operations and delivery of service.

- During the strategic planning process, when business decisions are made, IT is a relevant consideration.

- Promote the use of technology as a strategic business solution to improve services to the public.

This plan will continue to grow and change as technology and the needs of Missouri State Government change. It is our guide into the new millennium.

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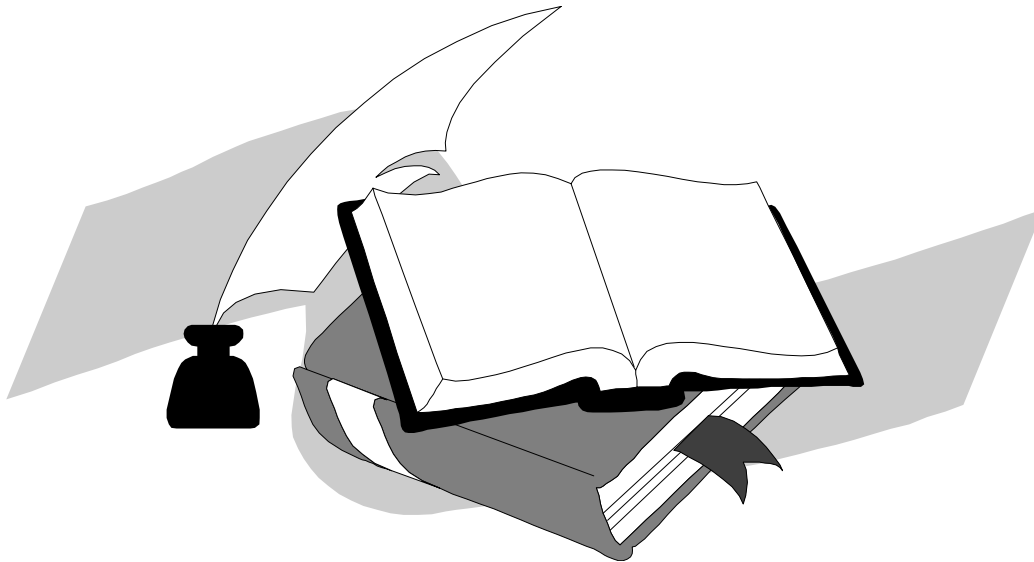
Foundation

The Vision

Information Technology will be the lens through which the Missouri Vision is projected into the 21st century. Missouri State Government will provide information and services to assist development of a statewide community that encourages and supports the pursuit of dreams, security, justice and opportunity, while working to protect individual rights and freedoms.

Information Technology will make Missouri State Government more accountable to Missouri citizens. Through integrity, effectiveness and common sense, we will exceed the public's expectations of responsiveness and excellence. The measure of success will be effective results for Missouri citizens and a positive return on state dollars invested in Information Technology.

The Mission

To enable effective government operations and provision of public services in support of the Missouri Vision through appropriate, cost-effective, coordinated, innovative and useful application of information technologies.

The Values

The following values represent the guiding principles and standards of the Information Technology Planning Board and Advisory Board. These values contribute to and support the goals and objectives articulated in this plan.

INTEGRITY
We believe in interagency honesty and fairness.

ACCOUNTABILITY
We are accountable to the citizens of Missouri and will conduct our business in a fiscally responsible manner.

RIGHT TO PRIVACY
We recognize that state government holds data about individuals and groups that are private and release of that data to the public is a violation of the public trust.

FREEDOM OF ACCESS
We believe in promoting simple and effective access to public information. Information should be available as needed, whenever needed.

COOPERATION
We believe that cooperation between state entities is fundamental to our work and we will consciously strive to share resources and work together.

EFFECTIVENESS
We believe the effectiveness of our services is crucial and needs to be balanced with the efficiency of operations.

RESPECT
We believe customers and employees are individuals deserving of our respect.

INNOVATION
We believe innovative solutions should be promoted and embraced.

EMPOWERMENT
We believe in the practice of making decisions at the lowest effective organizational level.

The Goals

The Information Technology Planning Board identified three key areas on which Missouri State Government should focus information technology.

Access

The availability of resources and the effective delivery of services are critical to the mission of the state. Our goal is to create an operational environment in which to provide access to appropriate information enabling the delivery of services to Missouri citizens.

Optimization

The effective and efficient utilization of state resources is necessary to support the mission of the state. Our goal is to create and support an operational environment where costs are managed, resources are shared and used to their maximum potential, and services are continually improved.

Architecture

Imperative to achieving OPTIMIZATION, the Enterprise Architecture serves as a planning vehicle and communications medium for technology infrastructure, principles and practices for the State of Missouri. A successful architecture is one that is flexible and easy to communicate.

Innovation

The effective application of information technology is vital to the mission of the state. Our goal is to encourage recognition of the value of information technology and the benefits it provides to the citizens of the state through the promotion of successful IT initiatives.

Chapter

3

Objectives and Strategies

The Vision, Mission, Values and Goals describe the foundation on which the following objectives and strategies are built. These objectives and strategies outline the major areas Missouri's IT community needs to address in the immediate future.

Access

OBJECTIVE 1
Provide computerized access to public information held by Missouri State Government.
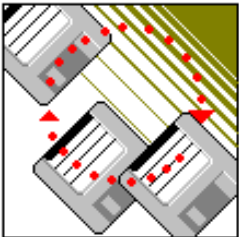
OUTCOME
Governmental services and public information are electronically available to Missouri citizens.

STRATEGY 1
Develop and implement policies and procedures that facilitate access to state information.

TACTIC
Develop policies for computerized public access for state information.

STRATEGY 2
Develop and implement technological systems that provide access to state information.

TACTIC
1. Develop Missouri State Government web space on the Internet.

2. Provide public access to information developed by Missouri State Government.

OBJECTIVE 2
Provide a single point-of-electronic-access to Missouri State Government services.

OUTCOME 1
Public electronic access points to state government services that span multiple agencies.

OUTCOME 2
An informed public as to the availability of single points of electronic government access.

STRATEGY 1
Create an ITAB task force to serve as a focal point for the state e-government issues and initiatives.

TACTIC
Establish a working committee as a clearinghouse to facilitate e-government issues with the following roles:

1. Identify candidate services that can be delivered electronically

2. Identify issues, enablers/solutions

3. Facilitate resource sharing and educational opportunities

4. Share guidelines, best practices and standards

5. Define processes, templates, examples

6. Identify roles within Missouri State Government

STRATEGY 2
Design technologies for single point-of-access.

TACTIC
Conduct a needs assessment to identify a solution for public access to Missouri State Government information.

Optimization

O B J E C T I V E   1
Effectively and efficiently utilize Missouri State Government Information Technology resources and investments.

O U T C O M E
State IT resources used in an effective and efficient manner.

S T R A T E G Y   1
Consolidate Missouri State Government mainframe data centers.

T A C T I C
Complete consolidation of Missouri State Government data centers.

S T R A T E G Y   2
Use the combined purchasing power of Missouri State Government entities to provide cost effective statewide purchasing contracts where appropriate in a spirit of partnership with vendors.

T A C T I C
1. Partner with Office of Administration, Division of Purchasing.

2. Promote and maintain a <u>Thursdays @ 10</u> Program to make state IT decision makers aware of new technology

3. Establish a system for monitoring the quality of contract performance using relevant metrics.

O B J E C T I V E   2
Promote state interests through coalitions and organizations with similar interests.

OUTCOME

Improved interoperability, lowered costs and increased effectiveness are realized.

STRATEGY

Membership and leadership in national and local organizations for the purpose of sharing best practices, project sharing and architectural development to ensure interoperability between vertical and horizontal business partners.

TACTIC

1. Publish best practice efforts, architectural standards and other related items.

2. Membership in the following:

National Association of State Information Resource Executives (NASIRE)

Missouri Government Information Technology Managers (MOGITM)

National architectural efforts

Information Technology Coalition

National Electronic Commerce Coordinating Council (NECCC)

Project Management Institute (PMI)

National Association of State Telecommunications Directors (NASTD)

Other relevant organizations

OBJECTIVE 3

Recruit, develop and retain a skilled information technology workforce within Missouri State Government.

OUTCOME

Missouri state government entities are able to attract and retain the quantity and quality of IT personnel required to support the state's mission.

STRATEGY

Develop and maintain an IT workforce recruitment, development and retention plan for Missouri State Government.

TACTIC

1. Implement and maintain a college and university recruitment and internship program.

2. Increase the selection pool of IT candidates for entry-level positions.

3. Provide industry competitive salaries for IT employees.

4. Identify and encourage workplace practices that increase worker satisfaction and loyalty.

OBJECTIVE 4
Consistently meet organizational business needs through IT projects that are delivered on time and within budget.

OUTCOME 1
IT projects are consistently used by state agencies to meet business needs.

OUTCOME 2
Within three years, 90% of state IT projects are delivered on time and within budget.

STRATEGY 1
Develop and implement a repeatable project management process to support IT projects.

TACTIC

1. Provide policies, guidelines, and best practices intended to supply proven traditional practices that can be widely applied, and a common lexicon for talking about project management.

2. Provide statewide web access to project management requirements, policies, guidelines and best practices.

3. Provide a statewide contract for acquiring project oversight and audit functions, assistance in development of metrics, collection and documentation of historical data, best practices and lessons learned.

STRATEGY 2
Require qualified project managers on IT projects prior to consideration for funding.

TACTIC
1. Partner with Office of Administration, Division of Budget and Planning.

2. Provide realistic funding requirements for projects and project managers that are flexible, attainable and value added.

3. Promote that 10% of IT staff within an agency are trained in project management principles and eligible for PMI certification.

STRATEGY 3
Require qualified risk management/project plans on IT projects prior to consideration for funding.

TACTIC
1. Partner with Office of Administration, Division of Budget and Planning.

2. Provide realistic funding requirements for projects and project managers that are flexible, attainable and value added.

3. Promote that 50% of the seats in project management classes are filled with state business unit personnel.

STRATEGY 4
Develop and implement a project management training and certification program.

T A C T I C

Provide a training program to develop the skills necessary to start making every assignment a successful transformational project.

S T R A T E G Y 5

Develop and implement an archive of mitigation strategies for IT projects.

T A C T I C

1. Provide statewide web access to project management requirements, policies, guidelines and best practices.

2. Provide policies, guidelines and best practices intended to supply proven traditional practices that can be widely applied and a common lexicon for talking about project management.

3. Provide a statewide contract for acquiring project oversight and audit functions, assistance in development of metrics, collection and documentation of historical data, best practices and lessons learned.

S T R A T E G Y 6

Develop a metrics program to support the qualification of project size and scope.

T A C T I C

1. Provide policies, guidelines, and best practices intended to supply proven traditional practices that can be widely applied, and a common lexicon for talking about project management.

2. Provide a statewide contract for acquiring project oversight and audit functions, assistance in development of metrics, collection and documentation of historical data, best practices and lessons learned.

S T R A T E G Y 7

Develop a project management transition program that properly places project ownership with the responsible business unit and maintains a partnership with IT project administrators.

TACTIC

1. Provide a risk management plan for every IT project that identifies the scope of the project, the stakeholders and the project sponsor along with other risk management criteria.

2. Promote the establishment of regularly scheduled project status meetings that involve business units and IT staff.

3. Provide a communication plan as a component of every project plan that will establish reporting criteria to the responsible business unit and the project sponsor.

4. Promote establishment of a change management methodology that involves business units and IT staff.

STRATEGY 8

Develop policies, guidelines and best practices that encourage and support solution reuse (i.e., CBD, model exchange).
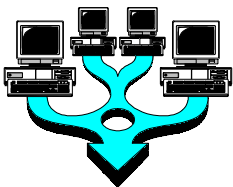
TACTIC

Develop and implement cost benefit analysis strategies and identify through guidelines and best practices a repeatable project management strategy.

Architecture

OBJECTIVE 1

Develop a State of Missouri enterprise architecture that facilitates business system sharing across departmental lines of responsibility.

OUTCOME 1

A technical architecture is adopted by the Information Technology Advisory Board (ITAB) by July 31, 2000.

OUTCOME 2
Architecture compliance audit program exists.

OUTCOME 3
The state has 30% architecture compliance in 3 years; and 100% compliance within 10 years.

STRATEGY 1
Develop technical and domain architectures that support agency initiatives while ensuring interoperability.

TACTIC
1. Maintain a working committee to develop architecture.

2. Work with appropriate technical groups to develop domains (i.e., Network, Applications Development, Security).

STRATEGY 2
Develop culture and methods to ensure compliance and ongoing updates to the architecture.

TACTIC
1. Establish a method for adherence and modification to architecture principles that includes the ability to change with technology changes.

2. The level of technical architectural compliance is included in the budget request and is considered in the evaluation process.

OBJECTIVE 2
Provide an environment that will guarantee the security of Missouri State Government data and the integrity of that data.

OUTCOME 1
There is a repository of security policies in use by Missouri State Government.

OUTCOME 2
There exists an auditable physical and system security operation within each agency.

OUTCOME 3
Government data is secured.

OUTCOME 4
Data quality assurance methodology template is used by agencies.

STRATEGY 1
Establish effective security architecture for the state.

TACTIC
1. Develop a catalog of external security requirements imposed upon the state.

2. Develop policies and procedures to implement and maintain security practices.

STRATEGY 2
Establish an effective data quality and integrity architecture standard.

TACTIC
Recommend data quality audit standards/practices to ensure quality of state maintained data.

OBJECTIVE 3
Ensure the ability to exchange data among government entities.

O U T C O M E   1
A widely recognized and accepted Missouri information architecture definition exists.

O U T C O M E   2
There are documented Missouri State Government information exchange points.

O U T C O M E   3
A data exchange model that supports Missouri State Government information exchange (i.e., data warehouse/data marts, central document exchange repository, etc.) is used.

S T R A T E G Y
Share information effectively with municipal, county, state and federal government agencies and other appropriate third parties.

T A C T I C
1. Establish information architecture definitions for Missouri State Government.

2. Join and participate in national groups of similar interest to develop methods to ensure data exchange.

O B J E C T I V E   4
Provide a communication network capable of supporting Missouri State Government's business operations and delivery of service.

O U T C O M E
Statewide network plan that addresses the needs of Missouri State Government, its remote offices/operations and service delivery to customers exists.

S T R A T E G Y   1
Determine the scope of study to address Missouri State Government's total network needs.

T A C T I C

1. Conduct a network study within the defined scope that will, among other topics, formulate alternatives that resolve current resource issues, duplication of effort and solutions and cost effectiveness. The study must ensure full agency participation and representative agency administration.

2. Establish statewide Network Architecture principles, practices and standards.

Awareness

O B J E C T I V E   1
During the strategic planning process, when business decisions are made, IT is a relevant consideration.

O U T C O M E
IT solutions are appropriate to business needs.

S T R A T E G Y   1
Identify agencies where increased IT participation would be beneficial.

T A C T I C
1. Create an organizational chart by agency identifying where IT is structured within the agency.

2. Encourage agencies identified by organizational chart to place IT strategically in their decision-making structure/process.

S T R A T E G Y   2
Develop and present the benefits of increased IT influence in the decision making process.

T A C T I C

Create a position paper using information created in Strategy 1 that reports the success of organizations where IT has an increased roll in the decision making process.

STRATEGY 3
Develop a unified approach to obtain legislative and executive commitment for the funding of information technology projects.

TACTIC
Using risk assessment information as a base, create a common, easy-to understand format for IT project proposals that will be utilized by all agencies.

OBJECTIVE 2
Promote the use of technology as a strategic business solution to improve services to the public.

OUTCOME
Recognition of technology as a strategic business solution is realized.

STRATEGY 1
Utilize national recognition to promote accomplishments internally.

TACTIC
1. Information on national recognition and recognition in trade magazines is electronically provided to agency and IT directors.

2. Provide information to trade magazines on successful state IT initiatives.

3. Obtain publicity for successful Missouri State Government IT initiatives in four trade magazines, two government magazines and two Missouri media publications per year.

S T R A T E G Y   2
Develop a public awareness plan for e-government.

T A C T I C
1. Create e-government ad campaign targeted at Missouri citizens.

2. Utilize electronic, print and other media avenues to distribute e-government information

Missouri Office of Information Technology